



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211  
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

*Art Wing*  
FEB - 3 1988

January 29, 1988

Mr. John G. Whitehead, Plant Manager  
United Technologies Pratt & Whitney  
400 Main Street  
East Hartford, CT 06108

RCRA RECORDS CENTER  
FACILITY Pratt & Whitney - Main St  
I.D. NO. CTD 990672081  
FILE LOC. R-1B  
OTHER RDMS #2894

Re: Comments on the Revised Burn-Zol Hazardous Waste Incinerator  
Closure Plan, United Technologies Pratt & Whitney East  
Hartford, Connecticut CTD990672081

Dear Mr. Whitehead:

As a result of the review of your resubmitted incinerator closure  
plan, dated January 16, 1987, we offer the following comments:

- ° Your Part B Permit application indicates that some of the wastes  
incinerated were listed (identified in 40 CFR Part 261, Subpart  
D). The current plan only addresses the waste as characteristic  
(40 CFR Part 261, Subpart C). This distinction is important  
when determining whether the refractory brick and other parts  
of the incinerator can be disposed of as non-hazardous waste.

The mixture rule (40 CFR 261.3(c)) specifies that any hazardous  
waste mixed with a solid waste results in the mixture being  
considered a hazardous waste unless the mixture no longer  
exhibits any hazardous waste characteristics and the hazardous  
waste in the mixture was only characteristically hazardous.

All residues pursuant to 40 CFR 265.351, such as refractory  
brick removed and intended for disposal, are considered solid  
waste. When in place, the refractory brick was exposed to  
hazardous waste<sup>1</sup>, both of a characteristic and listed

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- <sup>1</sup> EPA recognizes an incinerator as a treatment system and the  
effluent flow if it meets the DRE and other parameters specified  
by license as non-hazardous waste. The incinerator train through  
the final treatment process (i.e., scrubber) is exposed to hazar-  
dous waste. In this case, the effluent did not meet specified  
destruction/removal standards and, therefore, the stack is also  
considered to have been exposed to hazardous waste.

*Submission is due -  
45 days from 1/30/88  
or  
MARCH 15, 1988*

nature. Consequently, a determination of "non-hazardousness" of the refractory requires that:

- 1) A demonstration of total absence of any listed hazardous waste (and 40 CFR Part 261, Appendix VII "Hazardous constituents for which listed") and a level of hazardous waste characteristic properties below those specified in §261, Subpart C be made;
  - 2) A demonstration that levels of listed hazardous waste (and Hazardous constituents) and levels of characteristic hazardous waste properties present existed in the "virgin" refractory be made; or
  - 3) The refractory is delisted as specified in 40 CFR Part 260.22. This is a formal procedure that is conducted through the Office of Solid Waste at EPA in Washington, D.C., and the Connecticut Department of Environmental Protection.
- ° The proposed analytical activities are not sufficient. The analysis, as stated above requires at a minimum that you determine whether either characteristic or listed hazardous wastes are present. The listed hazardous waste evaluation must include analyses for the Part §261, Appendix VII constituents.
  - ° Scrape samples of refractory brick only allow you to analyze for surface and near surface contamination. EPA believes that it is more appropriate to take core samples of the refractory for analysis.
  - ° The utilization of a wipe test in determining that the exposed and uncovered metal surfaces are not contaminated, is not sufficiently explained in the plan. A useful reference would be the "Guide for Decontaminating Building Structures and Equipment at Superfund Sites" (EPA publication PB 85/201234 by HWERL) which may provide the necessary detail for describing a comprehensive wipe test protocol.
  - ° All structures which remain within the facility which housed the incinerator must be decontaminated to the extent necessary to protect human health and the environment from post-closure escape of hazardous waste, hazardous constituents, contaminated run-off or hazardous waste decomposition products. To meet this standard the contaminant concentrations must be reduced to a risk based level which considers each contaminant pathway (such as inhalation, dermal absorption and ingestion) for all hazardous constituents. Please note that the 40 CFR 264, Appendix IX constituent list is an acceptable alternative to §261, Appendix VIII when making that demonstration.

In addition to the above comments, there were some comments discussed with Mr. K. Vidmar by phone on March 15, 1987. These comments are listed below:

- ° There need to be two separate sets of wipe tests for the analysis that was proposed in the revised closure plan, one

set for CN and another set for metals. There will likely be additional wipe samples necessary to address the listed nature of the wastes used.

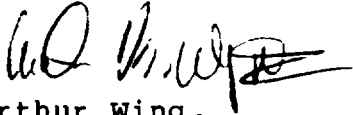
- ° There is no description of the decontamination activities for the equipment attached to the incinerator train such as blowers and burners. Will they be steam cleaned and tested? In addition, there are access doors that are apparently lined with refractory and are sealed with asbestos gaskets. What decontamination activities will be undertaken for these portions of the incineration system?
- ° Mr. Vidmar indicated that the incinerator will be disassembled, then sampled and decontaminated. This information should be included in the plan. In addition, the plan should include a description of the steps taken to prevent contamination and effect clean-up of the location where incinerator disassembly will occur.
- ° Disposal of the condensate from the steam cleaning operations and water used to flush the waste injection lines as non-hazardous waste require the same analysis for characteristics and Part 261 Appendix VII hazardous constituents as the other wastes generated during closure.
- ° This closure plan appears to constitute a partial closure plan for the CWTP and that fact should be stated in the plan. This will preclude any questions about why the surrounding area is not being addressed in this plan.
- ° When removal of ash and the refractory occurs we recommend some dust suppression technique be employed (such as wetting the ash down) and the chosen technique be written into the closure plan.
- ° Please describe the composite analysis strategy more fully for the refractory samples (i.e., which samples were/will be in which composites).
- ° If any additional samples of stained refractory are taken, they should be analyzed individually, to ensure that those areas which may be contaminated are not diluted through the analysis of sample compositing.
- ° Although the unit was operated at a negative pressure, and for a short period of time, EPA recommends that Pratt demonstrate that the outside of the unit is not contaminated. This could be accomplished by analyzing the shell through the use of wipe tests in various locations. A more definitive statement could then be made on page 8 of 13 of the closure plan.

The modifications to the plan required by the above comments should be completed and resubmitted for review and public notice

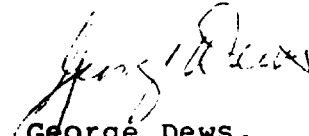
within a period of forty-five (45) days of receipt of this letter.

If you have any questions about the above comments please contact us.

Sincerely,



Arthur Wing,  
Environmental Engineer  
Waste Management Division  
(617) 573-9683



George Dews,  
Senior Sanitary Engineer  
Hazardous Materials Management Unit  
(203) 566-2264

cc: J. Murray